

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1 – 15: Cancelled

16. (New) A device for the UV treatment of fluids flowing in a flow channel, comprising;

a plurality of UV emitters that are disposed in the flow channel;

at least one UV sensor adapted to monitor an operating state of the UV emitters;

at least one power supply means for supplying power to said UV emitters, wherein said at least one power supply means is configured to modulate an operating voltage, for individual ones of said emitters or groups of said emitters, that is supplied to said emitters during operation; and

at least one unit, connected with said at least one UV sensor, for monitoring said UV emitters, wherein said at least one unit is configured to evaluate a modulation contained in UV radiation emitted by said UV emitters.

17. (New) A device according to claim 16, wherein said UV emitters are low-pressure mercury UV emitters.

18. (New) A device according to claim 17, wherein said low-pressure UV emitters are amalgam-type emitters.

19. (New) A device according to claim 16, wherein the operating voltage for each of said UV emitters is adapted to be modulated individually.

20. (New) A device according to claim 16, wherein the modulation is an amplitude modulation.

21. (New) A device according to claim 16, wherein evaluation of the modulation is adapted to be effected by means of a Fourier transformation.

22. (New) A device according to claim 16, wherein said UV emitters are adapted to be switched off individually for purposes of calibration.

23. (New) A method of operating a UV disinfection device provided with at least one UV emitter, including the steps of:

supplying at least one UV emitter with an operating voltage for a firing and continuous operation thereof;

modulating said operating voltage, an operating current, or an electrical power of at least one of said UV emitters;

detecting UV radiation emitted by said at least one UV emitter with a UV sensor that is adapted to temporally resolve the modulation;

evaluating a signal recorded by said UV sensor; and

checking whether the modulation in a signal given off by said UV sensor corresponds to a desired value.

24. (New) A method according to claim 23, wherein said modulating step comprises carrying out modulation differently for each UV emitter.

25. (New) A method according to claim 23, wherein during operation said UV emitters are operated in a substantially unmodulated manner, and wherein for checking an individual emitter, only such individual emitter is supplied with modulated operating voltage.

26. (New) A method according to claim 25, wherein said modulating step is carried out successively for all of said UV emitters.

27. (New) A method according to claim 25, wherein said modulating step is repeated cyclically.

28. (New) A method according to claim 23, wherein for low-pressure mercury UV

emitters, the operating voltage has a natural frequency in the range of from 20 kHz to 1 MHz, and wherein modulation of the operating voltage is in the form of amplitude modulation at frequencies of from 100 Hz to 100 kHz.

29. (New) A method according to claim 23, wherein adjacent ones of said UV emitters may be combined into groups, wherein emitters of a given group may be jointly modulated at similar frequencies.

30. (New) A method according to claim 29, wherein the emitters of a given group may be jointly modulated at frequencies that are adjacent in a frequency grid.

31. (New) An electronic power supply unit for issuing an operating voltage for a low-pressure mercury UV emitter, comprising means for applying a modulation to the operating voltage or to issued electrical power.

32. (New) A power supply unit according to claim 31, wherein the modulation is selectable as a function of an external control system with respect to at least one of range, frequency and type of modulation.